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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,348	04/19/2001	Randall W. Ojanen	K-1786	2490
7590 Kennametal Inc. P.O. Box 231 Latrobe, PA 15650			EXAMINER SINGH, SUNIL	
			ART UNIT	PAPER NUMBER
			3673	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/838,348

Applicant(s)

OJANEN, RANDALL W.

Examiner

Sunil Singh

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-17, 29, 30, 32-34, 36-40 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-17, 29, 30, 32-34, 36-40 and 43-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.

- 5) ☐ Notice of Informal Patent Application

- 6) ☒ Other: 1 Sheet of attached marked up drawing

Art Unit: 3673

DETAILED ACTION

Claim Objections

1. Claims 16, 30, 34, 38 are objected to because of the following informalities:

Claim 16 line 2, "said dimples" should be --said dimple--;

Claim 30 line 2, "said dimples" should be --said dimple--;

Claim 34 line 2, "said dimples" should be --said dimple--;

Claim 38 line 2, "said dimples" should be --said dimple--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Art Unit: 3673

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 15-17, 29-30, 32-34, 36-40, 43-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Sollami (US 6397652).

Sollami discloses a cutting tool assembly, said assembly comprising:

a cutting tool (10") a retainer sleeve (38") carried by the cutting tool, and including at least one radially outward protruding surface (31); wherein said retainer has a cylindrical circumference and a thickness dimension, the amount of radial projection of said protruding surface beyond the cylindrical surface of the retainer is between about 15 percent and about 30 percent of the thickness dimension of said retainer (see attached marked up Fig. 15).

With regards to the limitation that the "dimple extends between about .007-.020 inches beyond the exterior cylindrical surface of said sleeve", see attached marked up Figure 15, member (41) is defined at col. 6 line 55 as being .1875 inches and it was determined by measurement that the dimple extends about .0375 inches from the exterior of the sleeve thus meeting the limitation about ".007-.020" inches.

With regards to the limitation that the "diameter is between .06-.10 inches, see attached marked up Figure 15, member (41) is defined at col. 6 line 55 as being .1875 inches and it was determined by measurement that the dimple extends about .0375 inches from the exterior of the sleeve thus meeting the limitation about ".06-.10" inches in diameter.

In the event applicant does not agree that Sollami anticipates some or all of the claims, then the following rejection(s) apply:

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-17, 29-30, 32-34, 36-40, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollami '652.

Sollami discloses the claimed invention except for Sollami is silent about the thickness ratio between the dimple and the sleeve being between 15-30%, the dimple extending between about .007-.020 inches beyond the exterior cylindrical surface of said sleeve and the diameter of the dimple being between .06-.10 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sollami to have/include the above mentioned limitations, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Art Unit: 3673.

6. Claims 15-17, 29-30, 32-34, 36-40, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollami '652.

Sollami discloses the claimed invention except for Sollami is silent about the thickness ratio between the dimple and the sleeve being between 15-30%, the dimple extending between about .007-.020 inches beyond the exterior cylindrical surface of said sleeve and the diameter of the dimple being between .06-.10 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sollami to have/include the above mentioned limitations, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claims 15-17, 29-30, 32-34, 36-40, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollami '652.

Sollami discloses the claimed invention except for Sollami is silent about the thickness ratio between the dimple and the sleeve being between 15-30%, the dimple extending between about .007-.020 inches beyond the exterior cylindrical surface of said sleeve and the diameter of the dimple being between .06-.10 inches. It would have been an obvious matter of design choice to modify Sollami to have/include the above mentioned limitations, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Response to Arguments

8. Applicant's arguments filed in appeal brief (filed 10/7/05) have been fully considered but they are not persuasive. Applicant argues that the dimple thickness is about 88.9% the thickness of the sleeve. The examiner disagrees. As pointed out in the attached marked up Figure 15, member (41) is defined at col. 6 line 55 as being .1875 inches and it was determined by measurement that the dimple thickness is about .0375 inches and the sleeve thickness is about .125 inches thus meeting the limitation about 15-30%.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As evidenced by the numerous case laws cited above, the modifications made in the above rejections are obvious.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3673

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

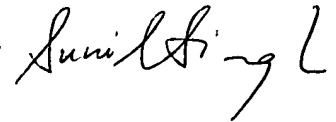
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Engle Patricia can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sunil Singh
Primary Examiner
Art Unit 3673



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2/2/07

Fig. 14

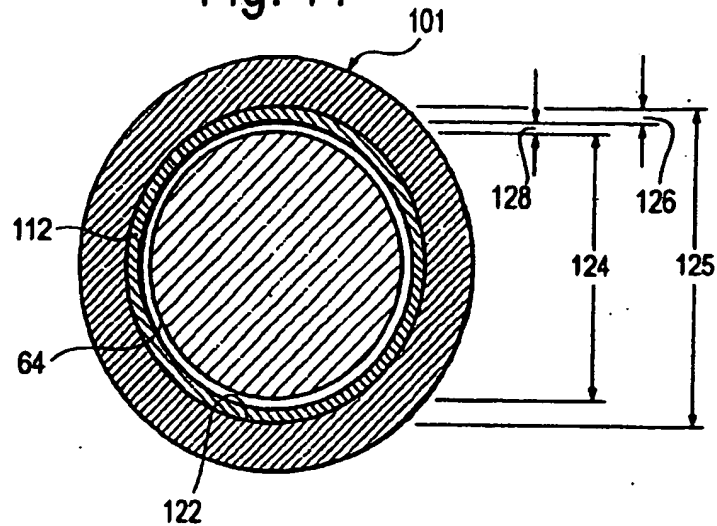


Fig. 15

